

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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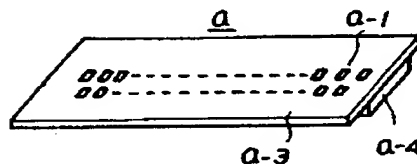
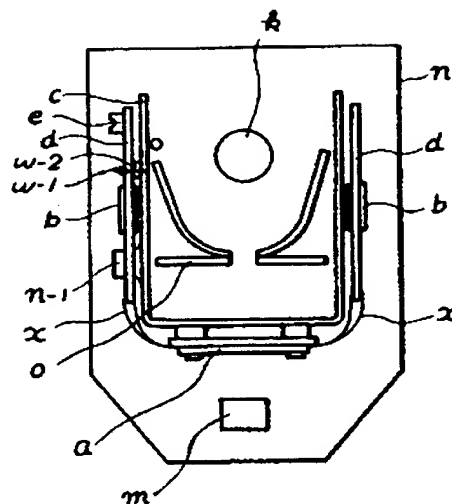
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INVENTOR : AOKI KENJI;

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TITLE : OPTICAL IMAGING DEVICE USING  
LIQUID CRYSTALS



ABSTRACT : PURPOSE: To obtain an optical imaging device having high speed and good cost performance, by using the constitution in which light emitted from a light source is passed through the light valve of nematic liquid crystals driven by voltage applied in high and low frequencies, and converged on the surface of a photosensitive drum.

CONSTITUTION: Light emitted from a light source (k) is passed through the light emission slit of a light shading plate (o) and a liquid crystal panel (a) driven by a driver (b), and converged on the surface of a photosensitive drum, thus carrying out imaging. In said panel (a), nematic liquid crystals are sealed in between bases a-3, a-4 subjected to horizontally orienting treatment and twisted, and polarizers are arranged above and below the crystals so as to cross the polarization directions at right angles, thus forming a light valve a-1. The light valve a-1 is opened and closed at high speed by driving it with application voltage of high and low frequencies, thus obtaining an optical imaging device high in speed and good in cost performance.

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